

CLAIMS

1. A locking mechanism for use with at least one door and/or window of a structure, the mechanism comprising at least one operating handle and at
5 least one electrical operating device.
2. A locking mechanism as claimed in Claim 1, comprising at least one remote control device.
- 10 3. A locking mechanism as claimed in Claim 2, comprising a fob which may be manually operated, e.g. by a householder from outside a building, to unlock a door or window.
- 15 4. A locking mechanism as claimed in any one of the preceding claims, comprising a first rotatable member associated with the handle, a second rotatable member spaced from the first rotatable member and associated with a dead bolt, and a control member extending between the first and second rotatable members.
- 20 5. A locking mechanism as claimed in Claim 4, in which the second rotatable member is movable into a locking position in which it causes the control member to prevent operation of the handle.
- 25 6. A locking mechanism as claimed in Claim 5, in which the second rotatable member is rotatable by means of a motor.
7. A locking mechanism as claimed in Claim 6, in which the motor is associated with a gear train which provides a high mechanical advantage in favour of the motor, for example by incorporating a worm.
- 30 8. A locking mechanism as claimed in any one of Claims 4 to 7, incorporating a first clutch to enable the second operating member to be

manually rotated if desired, notwithstanding the connection of the second rotatable member to the motor.

9. A locking mechanism as claimed in any one of Claims 4 to 8,
5 incorporating a second clutch arranged to slip once the motor has moved the second rotatable member to a predetermined position, the change in electrical current to the motor, on slippage of the second clutch, providing a readily detectable and identifiable signal indicating that the motor has achieved its function.
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10. A locking mechanism as claimed in any one of Claims 4 to 9, comprising a control link which, when the second rotatable member is in the locking position, is locked against movement by a cam associated with the second rotatable member, the other end of the control member locking the handle
15 against movement.
11. A locking mechanism as claimed in Claim 10, in which the control member operates to lock the handle against movement by the engagement of a projection in a recess.
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12. A locking mechanism as claimed in Claim 10 or Claim 11, in which there is an internal handle and an external handle, both of which are locked against movement when the second rotatable member is in the locking position.
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13. A locking mechanism as claimed in Claim 12, in which the cam has a day latch position in which it does not prevent movement of the control member, but the control member is biased into a locking position.
14. A locking mechanism as claimed in Claim 13, such that when the control
30 member is biased into the locking position, the external handle cannot be moved, but the projection and recess locking the internal handle are such that

there is a ramp surface so that the internal handle can be moved, the associated projection riding along the ramp and out of the recess.

15. A locking mechanism as claimed in Claim 14, such that operation of the
5 fob causes the control member to move into a position in which the projection is clear of the recess and both the internal and external handles can be operated.

16. A locking mechanism as claimed in Claim 15, such that after a door has
10 been opened using the fob, and then closed, the locking mechanism moves into the day latch condition.

17. A locking mechanism as claimed in Claim 16, in which there is a short
15 delay before the locking mechanism moves into the day latch position, for example from 5 to 10 seconds.

18. A locking mechanism as claimed in any one of the preceding claims,
associated with internal safety devices, for example at least one smoke
20 detector, at least one burglar alarm and at least one panic button.

19. A locking mechanism as claimed in any one of the preceding claims,
linked to other locking mechanisms on other doors and/or windows, so that
several entry points on a structure may be controlled from a single locking
mechanism, for example using a fob associated with that locking mechanism.
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20. A locking mechanism as claimed in Claim 4, in which the second
rotatable member is manually rotatable by a knob, the knob being arranged so
that it is difficult for a small child to operate.

30 21. A locking mechanism as claimed in Claim 20, in which it is necessary to press the knob in and keep the knob pressed in before it is turned.

22. A locking mechanism as claimed in Claim 21, such that pressing the knob in causes one drive gear associated with the second rotatable mechanism to engage with another such drive gear.

5 23. A locking mechanism constructed and arranged substantially as herein described, with reference to the accompanying drawings.

24. A movable panel such as a door or window, fitted with a locking mechanism as claimed in any one of the preceding claims.

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25. A structure fitted with a locking mechanism as claimed in any one of the preceding claims.